

CLAIMS

5 1. A gear oil or transmission fluid composition comprising a major amount of lubricant basestock and at least one functional additive wherein a major amount of the lubricant basestock comprises a mineral oil having an iodine number of less than 9 and comprising at least 45% by weight of aliphatic saturates.

2. The composition of claim 1 wherein the mineral oil is greater than 80% by weight of the basestock.

3. The composition of claim 1 further comprising at least one polymer.

10 4. The composition of claim 3 wherein the polymer has a weight average molecular weight of less than about 50,000.

5. The composition of claim 3 further comprising at least one fluidizing agent.

15 6. The composition of claim 5 wherein the fluidizing agent is present in an amount of up to about 30% by weight.

7. The composition of claim 1 wherein the functional additive is a antiwear or extreme pressure agent.

20 8. The composition of claim 7 wherein the antiwear extreme pressure agent is at least one sulfur compound, at least one phosphorus containing compound, at least one boron containing compound or mixtures of two or more thereof.

9. The composition of claim 8 wherein the antiwear or extreme pressure agent is a sulfurized olefin, metal or ashless dithiocarbamate, or mixtures of two or more thereof.

25 10. The composition of claim 8 wherein the sulfur antiwear extreme pressure agent is an organic polysulfide.

11. The composition of claim 8 wherein the antiwear extreme pressure agent is at least one phosphoric acid ester or salt thereof, at least one metal dithiophosphate, at least one reaction product of a phosphite and sulfur or a source of sulfur, at least one phosphite, at least one reaction product of a phosphorus acid or anhydride and an unsaturated compound, or mixtures of two or more thereof.

12. The composition of claim 11 wherein the antiwear extreme pressure agent is at least one phosphorus acid ester, at least one reaction product of a phosphite in a sulfur or a source of sulfur or mixtures of two or more thereof.

13. The composition of claim 7 wherein the antiwear extreme pressure agent is a boron compound.

14. The composition of claim 1 wherein the functional additive is at least one antioxidant.

15. The composition of claim 14 wherein the antioxidant is at least one amine antioxidant, at least one phenol antioxidant, at least one dithiophosphoric acid ester antioxidant, phosphite antioxidants, sulfurized Diels-Alder adducts and mixtures thereof.

16. The composition of claim 15 wherein the antioxidant is at least one amine antioxidant, at least one dithiocarbamate antioxidant, and at least one phenol antioxidant.

17. A gear oil composition comprising at least one Group III basestock, at least one polymer having a weight average molecular weight of less than about 50,000, at least one fluidizing agent, and at least one functional additive.

18. The composition of claim 9 wherein the Group III basestock comprises greater than 80% by weight of the basestock of the composition.

19. A transmission fluid comprising at least one Group III basestock and at least one functional additive.

20. A lubricant comprising a major amount of a mineral oil having an iodine number of less than 9, a viscosity index of 120 and a sulfur content of less than 0.5% and comprising at least 55% aliphatic saturates, and gear oil or transmission fluid additives.

5 21. The composition of claim 20 wherein the mineral oil contains up to about 45% cyclic saturates.

22. The composition of claim 20 wherein aliphatic saturate content of the mineral oil is greater than 60%.

23. The composition of claim 20 further comprising a viscosity modifier.

10 24. The composition of claim 23 wherein the viscosity modifier is a polyalkene, a polyacrylate, or a polymethacrylate.

25. The composition of claim 20 further comprising an antioxidant in an amount greater than 1.5% by weight.

15 26. The composition of claim 25 wherein the antioxidant comprises aromatic substituted amines, hindered phenols, sulfur coupled phenols, aromatic phosphites, and alkylene coupled dithiocarbamates.

20 27. A gear oil or transmission fluid composition comprising a major amount of a basestock and a gear oil or transmission fluid concentrate wherein the basestock comprises a major amount of a mineral oil having iodine number of less than 9 and comprises of at least 55% aliphatic saturate.